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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/827,408 | 04/06/2001 | Kevin P. Nasman | 3197-000012 | 6009 |
| 27572 | 7590 | 05/20/2004 | EXAMINER | |
| HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303 | | | KASENGE, CHARLES R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2125 | |
| DATE MAILED: 05/20/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,408

Applicant(s)

NASMAN ET AL.

Examiner

Charles R Kasenge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6 and 8-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6, 9-13, 15, 16, 18-26, 28, 29, 31-34, and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by March U.S. Patent 6,490,506. Referring to claims 1, 10, 16, 20, 25, 26, 29, 31, and 32, March discloses a method of monitoring a power delivery system (abstract) comprising the steps of: providing a power generator which generates an output power, a sensor for detecting at least one parameter of the power delivery system, and a controller for receiving input from the sensor and providing control signals to vary operation of the power generator (col. 3, lines 46-58); monitoring a plurality of parameters associated with the power delivery system, including collecting historical data on the parameters, defining at least one condition for at least one parameter based on the historical data (col. 14, lines 27-48), and modeling physical outcomes in accordance with selected parameters (col. 11, lines 48-57); and applying a set of rules to the at least one condition to determine a state of operation of the power

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delivery system (col. 3, lines 33-45). March discloses a remote monitor (col. 7, lines 44-54) having a database for storing data (col. 9, lines 60-67) and predicting a future state of operation of the power delivery system (col. 15, lines 37-67).

Referring to claims 2, 3, 13, 21-24, 32, and 34, March discloses the method of claim 1 further comprising the step of defining a set of rules of operation based upon the parameters associated with the power delivery system (col. 8, lines 13-28). March discloses the method of claim 1 further comprising the step of signaling fault conditions of the power delivery system in accordance with an outcome of the step of applying the set of rules to the parameters (col. 13 and 14, lines 66-67 and 1-16).

Referring to claims 6, 15, and 28, March discloses the method of claim 4 wherein the step of defining the at least one condition further comprises the step of defining a range wherein if a parameter falls within the range, the condition for the at least one parameter is acceptable (col. 3, lines 59-67).

Referring to claims 9, 18, 19, 29, and 30, March discloses the method of claim 1 wherein the parameters include at least one of the group of power conversion efficiency, operating hours of the power delivery system, output actuation of the power delivery system, component temperature, ambient temperature, humidity, particle contamination, communications link error rate, response characteristic, drift in input power, drift in output power, number of contact cycles, number of thermal cycles, number of transients, feedback, and trends in parameter values (col. 10 and 11, lines 59-67 and 1-15). March discloses a match network receiving the output power, the match network generating impedance between the power generator and a load (col. 5, lines 20-24). The Office interprets the generation of impedance as being inherent to power generation.

Referring to claims 11, 12, 33, 38, and 39, March discloses the power delivery system of claim 10 wherein the system monitor indicates a warning in accordance with the state of operation of the power delivery system (col. 8, lines 7-11). March discloses the power delivery system of claim 10 wherein the system monitor further comprises a database for collecting data on the parameters input to the system monitor (col. 8, lines 12-14). March discloses the parameters sent to the remote monitor being defined by an operator (col. 8, lines 7-11).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 8, 14, 17, 27, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over March as applied to the claims above, and further in view of Snow et al. U.S. Patent 5,734,575. March does not expressly disclose using a fuzzy logic system, a neural network system, nor an expert system. Snow discloses the method of claim 4 wherein the step of defining the at least one condition further comprises the step of utilizing one of a fuzzy logic system (col. 6 and 7, lines 64-67 and 1-6) and a neural network system to define the at least one condition (col. 4, lines 54-62). Snow discloses the method of claim 4 further comprising providing an expert system to receive the rules and the at least one condition, wherein the expert system indicates a failure mode criteria in accordance with the application of the rules to the conditions (col. 4, lines 54-62).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a neural network and an experts system. One of ordinary skill in the art would have been motivated to do this since neural networks and expert systems are commonly used to identify conditions that will create an accurate model (col. 4, lines 54-62).

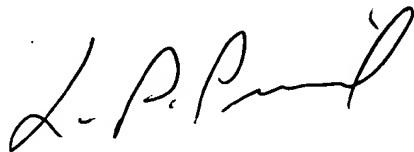
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kasenge whose telephone number is 703 305-8592. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703 308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

CK
May 17, 2004



LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100